## Summary of IHS LEED® Credit Groupings

Capital Cost Impact		LCCI	mpact		Langdon
Low	High	Low	High	Pts	Study

Tier 1: I	Prerequisites						
SSPR1	Construction Activity Pollution Prevention	\$0	\$0	\$0	\$0	-	-
EAPR1	Fundamental Commissioning of the Building Energy Systems	\$18,000	\$22,000	\$0	\$0	-	-
EAPR2	Minimum Energy Performance	\$0	\$0	\$0	\$0	-	-
EAPR3	Fundamental Refrigerant Management	\$0	\$0	\$0	\$0	-	-
MRPR1	Storage & Collection of Recyclables	\$0	\$46,000	\$5,700	\$70,500	-	-
EQPR1	Minimum IAQ Performance	\$0	\$0	\$0	\$0	-	-
EQPR2	Environmental Tobacco Smoke (ETS) Control	\$0	\$0	\$0	\$0	-	-
	Total, Prerequisites:	\$18,000	\$68,000	\$5,700	\$70,500	-	

Tier 2: I	Mandate or Standard Practice						
EA1(1)	Optimize Energy Performance (First Two Points; See Note 2. Below)	\$0	\$0	\$0	\$0	2	94%
EQ7.1	Thermal Comfort, Design	\$0	\$0	\$0	\$0	1	78%
ID2	LEED® Accredited Professional	\$0	\$0	\$0	\$0	1	97%
WE1.1	Water Efficient Landscaping, Reduce by 50%	\$7,900	\$13,100	\$9,200	\$21,000	1	83%
WE1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	\$0	\$45,000	-\$21,900	\$48,200	1	16%
	Total, Mandate or Standard Practice:	\$7,900	\$58,100	-\$12,700	\$69,200	6	74%

Tier 3: I	High Feasibility						
EA1(2)	Optimize Energy Performance (Points 3-5; See Note 2. Below)	\$20,000	\$40,000	-\$82,800	-\$61,200	3	50%
SS4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	<b>\$</b> 0	\$1,200	\$0	\$0	1	80%
SS4.4	Alternative Transportation, Parking Capacity	\$0	\$0	\$0	\$0	1	58%
EQ4.1	Low-Emitting Materials, Adhesives & Sealants	\$0	\$1,600	\$0	\$0	1	100%
EQ4.2	Low-Emitting Materials, Paints & Coatings	\$0	\$21,100	\$0	\$0	1	95%
EQ4.3	Low-Emitting Materials, Carpet Systems	\$0	\$14,300	\$0	\$0	1	91%
SS7.2	Heat Island Effect, Roof	\$22,500	\$27,500	-\$9,200	-\$5,500	1	42%
ID1.4	Innovation in Design: SS7.2-SRI 78 for 100% of roof surface	\$0	\$0	\$0	\$0	1	0%
SS8	Light Pollution Reduction	\$0	\$13,000	\$0	\$0	1	61%
EA5	Measurement & Verification	\$3,000	\$8,000	\$3,700	\$15,000	1	24%
EQ1	Outdoor Air Delivery Monitoring	\$3,000	\$3,600	\$700	\$1,200	1	52%
EQ2	Increased Ventilation	\$2,000	\$5,000	\$14,300	\$47,700	1	16%
EQ3.1	Construction IAQ Management Plan, During Construction	\$300	\$1,500	\$0	\$0	1	95%
EQ3.2	Construction IAQ Management Plan, Before Occupancy	\$1,000	\$3,000	\$0	\$0	1	88%
EQ5	Indoor Chemical & Pollutant Source Control	\$1,300	\$11,000	\$1,200	\$2,500	1	64%
EQ6.1	Controllability of Systems, Lighting	\$0	\$10,000	\$0	\$0	1	25%
EQ7.2	Thermal Comfort, Verification	\$0	\$0	\$1,000	\$2,000	1	24%
	Total, High Feasibility:	\$53,100	\$160,800	-\$71,100	\$1,700	19	59%

Tier 4: N	Moderate Feasibility						
EA1(3)	Optimize Energy Performance (Points 6-7; See Note 2. Below)	\$30,000	\$60,000	-\$55,200	-\$40,800	2	20%
SS6.1	Stormwater Design, Quantity Control	\$0	\$83,500	\$0	\$49,900	1	34%
SS7.1	Heat Island Effect, Non-Roof	\$120,000	\$143,400	-\$11,800	-\$7,100	1	62%
EA3	Enhanced Commissioning	\$16,700	\$22,500	\$0	\$0	1	43%
EQ4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	\$0	\$159,900	\$0	\$0	1	41%
EA4	Enhanced Refrigerant Management	\$5,000	\$20,000	\$5,600	\$7,500	1	58%
MR4.1	Recycled Content, 10% (post-consumer + ½ pre-consumer)	\$0	\$27,900	\$0	\$0	1	94%
MR5.1	Regional Materials, 10% Extracted, Processed & Manufactured Regionally	\$0	\$50,000	\$0	\$0	1	97%
EA2(1)	On-Site Renewable Energy (First Two Points)	\$294,000	\$359,400	-\$43,900	-\$32,400	2	8%
	Total, Moderate Feasibility:	\$465,700	\$926,600	-\$105,300	-\$22,900	11	56%

Capital Co	st Impact	LCC I	mpact		
Low	High	Low	High	Pts	

Tier 5: I	_ow Feasibility					
EA1(4)	Optimize Energy Performance (Points 8-10; See Note 2. Below)	-	-	-\$82,800	-\$61,200	3
WE3.1	Water Use Reduction, 20% Reduction	-	-	-	-	1
WE2	Innovative Wastewater Technologies	\$43,000	\$53,000	\$58,000	\$71,000	1
WE3.2	Water Use Reduction, 30% Reduction	-	-	-	-	1
MR3.1	Materials Reuse, 5%	-	-	\$0	\$0	1
MR4.2	Recycled Content, 20% (post-consumer + ½ pre-consumer)	-	-	\$0	\$0	1
MR5.2	Regional Materials, 20% Extracted, Processed & Manufactured Regionally	-	-	\$0	\$0	1
MR6	Rapidly Renewable Materials	-	-	-	-	1
MR7	Certified Wood	-	-	\$0	\$0	1
EQ6.2	Controllability of Systems, Thermal Comfort	-	-	-	-	1
EQ8.1	Daylight & Views, Daylight 75% of Spaces	-	-	-	-	1
EQ8.2	Daylight & Views, Views for 90% of Spaces	-	-	\$0	\$0	1
ID1.3	Innovation in Design: SS7.1-100% Hardscape meets requirements	\$240,000	\$286,800	-\$11,800	-\$7,100	1
MR3.2	Materials Reuse,10%	-	-	\$0	\$0	1
MR2.1	Construction Waste Management, Divert 50% from Disposal	-	-	\$0	\$0	1
MR2.2	Construction Waste Management, Divert 75% from Disposal	-	-	\$0	\$0	1
EA2(2)	On-Site Renewable Energy (Final Point)	-	-	-	-	1
	Total, Low Feasibility:	\$283,000	\$339,800	-\$36,600	\$2,700	19

Tier 6:	Fier 6: Situational										
	03.04.4										
SS1	Site Selection	\$24,000	\$105,000	\$0	\$0	1					
SS2	Development Density & Community Connectivity	-	-	\$0	\$0	1					
SS4.1	Alternative Transportation, Public Transportation Access	-	-	\$0	\$0	1					
SS5.2	Site Development, Maximize Open Space	\$0	<b>\$</b> O	\$0	\$0	1					
ID1.2	Innovation in Design: SS5.2-Provide 2x Bldg Footprint as open space	\$0	<b>\$</b> O	\$0	\$0	1					
SS3	Brownfield Redevelopment	\$44,000	\$330,000	\$0	\$143,300	1					
SS6.2	Stormwater Design, Quality Control	\$70,000	\$124,300	\$0	\$27,800	1					
SS5.1	Site Development, Protect of Restore Habitat	\$0	\$21,000	\$0	\$0	1					
ID1.1	Innovation in Design: SS5.1-Restore 75% of Site	\$18,000	\$21,000	\$0	\$0	1					
MR1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	-	-	\$0	\$0	1					
MR1.2	Building Reuse, Maintain 100% of Existing Walls, Floors & Roof	-	-	\$0	\$0	1					
MR1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	-	-	\$0	\$0	1					
	Total, Situational:	\$156,000	\$601,300	\$0	\$171,100	12					

Tier 7: Non-Construction									
SS4.3 EA6	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles Green Power	\$21,000 -	\$26,000 -	-\$18,600 -	<b>\$</b> 0 -	1			
	Total, Non-Construction:	\$21,000	\$26,000	-\$18,600	\$0	2			

## Notes

- 1. "Langdon Study" refers to a study, which referenced the frequency of building projects achieving a particular credit, when pursuing a LEED "certified" level
- 2. The Energy Policy Act of 2005 will promulgate energy practices within IHS, to exceed ASHRAE 90.1 by 30%. This will earn six points for this LEED credit. For the purposes of this study however, the credits are divided into different tiers (more conservative.)

Summary of First Four Tiers (as a % of total Construction Cost)	Cap. Cos	t Range	% of Tot.	Points
Prerequisites	\$18,000	\$68,000	0.1 to 0.4	0
Mandate or Standard Practice	\$7,900	\$58,100	0.0 to 0.3	6
High Feasibility	\$53,100	\$160,800	0.3 to 1.0	19
Moderate Feasibility	\$465,700	\$926,600	2.8 to 5.5	11
Total	\$544,700	\$1,213,500	3.3 to 7.2	36

Table 2-2: Credit Categorization Matrix, including capital and life cycle cost impacts